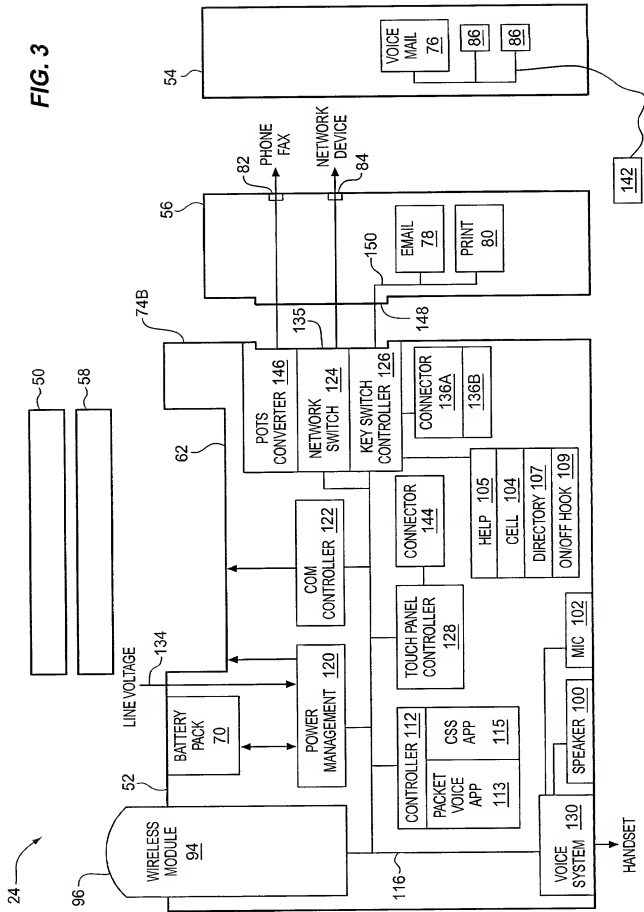
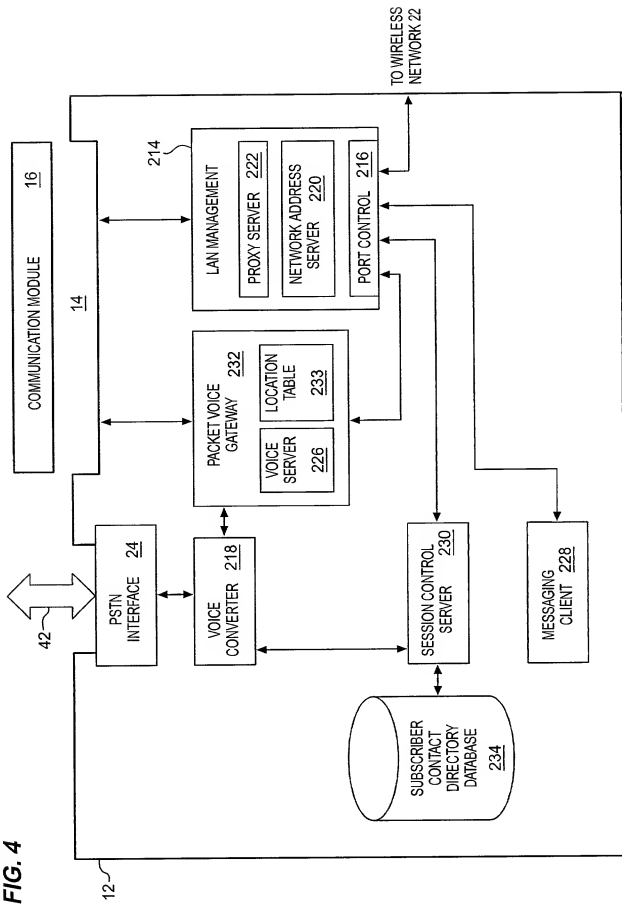


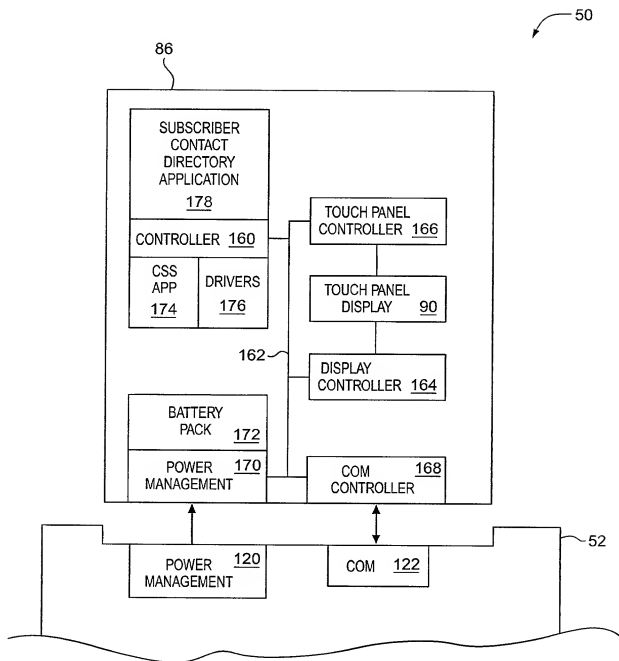
**FIG. 1**



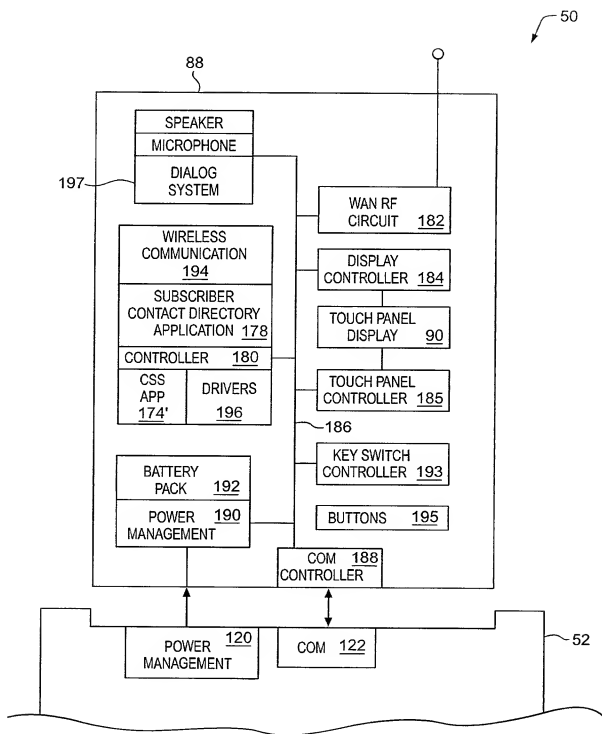


**FIG. 4**

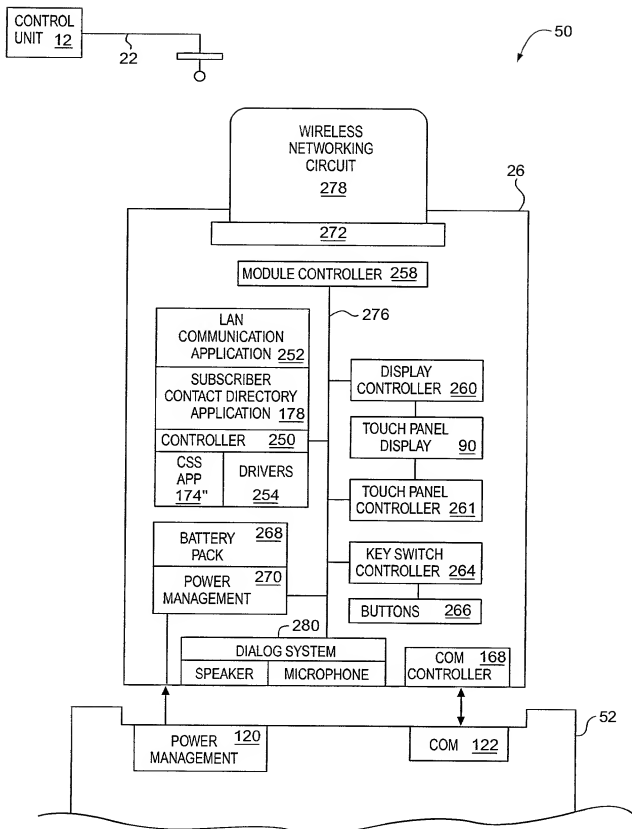




**FIG. 5**



**FIG. 6**



**FIG. 7**

| START UP STATE - WAITING FOR EVENTS               |  |
|---|--|
| EVENTS  | STEPS  |
| 300 OPEN SESSION REQUEST ON<br>PREDETERMINED PORT | <ul style="list-style-type: none"> <li>• ESTABLISH NEW LOCAL COMMUNICATION<br/>DEVICE STATE MACHINE</li> <li>• ESTABLISH SESSION</li> <li>• SEND LOGON CONTROL SCRIPTS</li> <li>• GET CSS INTERFACE CONFIGURATION</li> <li>• PROVIDE MAIN MENU DISPLAY CONTENT</li> <li>• PROVIDE MAIN MENU LAYOUT CONTROL</li> <li>• GO TO MAIN MENU STATE</li> </ul> |

**FIG. 8A**

| MAIN MENU STATE - WAITING FOR EVENTS |   |
|--------------------------------------|---|
| EVENTS                               | STEPS   |
| 302 MENU SELECTION                   | • GO TO SELECTED STATE  |
| 308 INITIALIZE SUBSCRIBER DEVICE     | <ul style="list-style-type: none"> <li>• SEND ID EXTRACTION CONTROL SCRIPTS</li> <li>• GET SUBSCRIBER DEVICE ID</li> <li>• UPDATE NETWORK LOCATION TABLE</li> <li>• SYNCHRONIZE SUBSCRIBER CONTACT<br/>DIRECTORY</li> <li>• PROVIDE INITIAL DISPLAY CONTENT<br/>(MAIN MENU)</li> <li>• PROVIDE DISPLAY LAYOUT CONTROL</li> <li>• GO TO SUBSCRIBER DEVICE MAIN<br/>MENU STATE</li> </ul> |
| 310 HELP REQUEST                     | <ul style="list-style-type: none"> <li>• SET UP AUDIO SESSION CHANNEL</li> <li>• TO AUDIO HELP CSS</li> <li>• GO TO AUDIO HELP STATE</li> </ul>   |

**FIG. 8B**



316

| SUBSCRIBER DEVICE MAIN MENU STATE - WAITING FOR EVENTS |   |
|--|---|
| EVENTS   | STEPS   |
| 312 MENU SELECTION                                     | <ul style="list-style-type: none"><li>• GO TO SELECTED STATE</li></ul>  |
| 320 HELP REQUEST                                       | <ul style="list-style-type: none"><li>• PROVIDE HELP MENU DISPLAY CONTENT</li><li>• PROVIDE HELP MENU DISPLAY LAYOUT CONTROL</li><li>• GO TO GRAPHIC HELP STATE</li></ul>   |
| 322 MESSAGE REQUEST                                    | <ul style="list-style-type: none"><li>• GET MESSAGES FROM REMOTE SYSTEM</li><li>• SORT MESSAGES BY TYPE</li><li>• PROVIDE MESSAGE LIST CONTENT</li><li>• PROVIDE MESSAGE LIST LAYOUT CONTROL</li><li>• GO TO MESSAGE LIST STATE</li></ul> |
| 324 AUDIO MESSAGE REQUEST                              |   |
| 314 DIRECTORY REQUEST                                  | <ul style="list-style-type: none"><li>• PROVIDE DIRECTORY CONTENT AND LAYOUT CONTROL</li><li>• TRANSITION TO SUBSCRIBER DIRECTORY STATE</li></ul>   |
| 326 SUBSCRIBER DEVICE REMOVE                           | <ul style="list-style-type: none"><li>• GO TO MAIN MENU STATE</li></ul>   |

**FIG. 8C**

328

| MESSAGE LIST STATE - WAITING FOR EVENTS |  |
|---|--|
| EVENTS                                  | STEPS  |
| 334 AUDIO MESSAGE SELECT                | <ul style="list-style-type: none"> <li>• SEND AUDIO FILE TO CSS</li> <li>• PROVIDE PROCESSING SCRIPT TO OUTPUT FILE</li> <li>• GO TO AUDIO SESSION STATE</li> </ul>          |
| 336 MESSAGE SELECT                      | <ul style="list-style-type: none"> <li>• PROVIDE MESSAGE DISPLAY CONTENT</li> <li>• PROVIDE MESSAGE DISPLAY LAYOUT CONTROL</li> <li>• GO TO MESSAGE DISPLAY STATE</li> </ul> |
| 338 MESSAGE PRINT                       | <ul style="list-style-type: none"> <li>• FORMAT MESSAGE CONTENT FOR PRINTER</li> <li>• SEND MESSAGE FILE TO PRINTER</li> <li>• GO TO MESSAGE LIST STATE</li> </ul>           |
| 340 HELP REQUEST                        | <ul style="list-style-type: none"> <li>• PROVIDE HELP MENU DISPLAY CONTENT AND DISPLAY LAYOUT CONTROL</li> <li>• GO TO GRAPHIC HELP STATE</li> </ul>                         |
| 342 SUBSCRIBER DEVICE REMOVE            | <ul style="list-style-type: none"> <li>• GO TO MAIN MENU STATE</li> </ul>  |

**FIG. 8D**

370

| SUBSCRIBER DIRECTORY STATE - WAITING FOR EVENTS |   |
|---|---|
| EVENTS  | STEPS   |
| 372 RECEIVE CONTACT SELECTION                   | <ul style="list-style-type: none"> <li>• PROVIDE CONTROL SCRIPT TO SETUP AUDIO SESSION WITH CONTACT</li> <li>• PROVIDE AUDIO SESSION DISPLAY CONTENT AND LAYOUT CONTROL</li> <li>• TRANSITION TO AUDIO SESSION STATE</li> </ul> |
| 374 HELP REQUEST                                | <ul style="list-style-type: none"> <li>• PROVIDE HELP MENU DISPLAY CONTENT AND DISPLAY LAYOUT CONTROL</li> <li>• GO TO GRAPHIC HELP STATE</li> </ul>  |
| 378 SUBSCRIBER DEVICE REMOVE                    | <ul style="list-style-type: none"> <li>• GO TO MAIN MENU STATE</li> </ul>   |

**FIG. 8E**

344

| BASE STATE - WAITING FOR EVENTS |   |  |
|---------------------------------|---|--|
|                                 | EVENTS  | STEPS  |
| 354                             | TOUCH PANEL   | <ul style="list-style-type: none"> <li>• REPORT TOUCH PANEL EVENT TO CONTROLLER</li> <li>• RETURN TO BASE STATE</li> </ul>         |
| 356                             | SUBSCRIBER INTERFACE CONTROL BUTTON                             | <ul style="list-style-type: none"> <li>• REPORT BUTTON ACTIVATION TO CONTROLLER AND PVA</li> <li>• RETURN TO BASE STATE</li> </ul> |
| 358                             | RECEIVE DISPLAY CONTENT AND LAYOUT CONTROL MESSAGES             | <ul style="list-style-type: none"> <li>• UPDATE DISPLAY</li> <li>• RETURN TO BASE STATE</li> </ul>                                 |
| 360                             | RECEIVE PROCESSING SCRIPT                                       | <ul style="list-style-type: none"> <li>• PROCESS SCRIPT</li> <li>• RETURN TO BASE STATE</li> </ul>                                 |
| 362                             | WAN TELEPHONE SIGNAL  | <ul style="list-style-type: none"> <li>• GO TO WAN STATE</li> </ul>  |
| 364                             | DETECTED SUBSCRIBER DEVICE                                      | <ul style="list-style-type: none"> <li>• SEND INITIALIZE SUBSCRIBER MESSAGE</li> <li>• RETURN TO BASE STATE</li> </ul>             |
| 350                             | RECEIVE MESSAGES FROM CONTROLLER DIRECTED TO SUBSCRIBER DEVICE  | <ul style="list-style-type: none"> <li>• RELAY MESSAGES TO SUBSCRIBER DEVICE</li> </ul>  |
| 352                             | RECEIVE MESSAGES FROM SUBSCRIBER DEVICE DIRECTED TO CONTROLLERS | <ul style="list-style-type: none"> <li>• RELAY MESSAGES TO CONTROLLER</li> </ul>   |

| 346 | START UP - WAITING FOR EVENTS |   |  |
|-----|-------------------------------|---|--|
|     | EVENTS                        | STEPS   |  |
| 366 | NETWORK CONNECTION            | <ul style="list-style-type: none"> <li>• SESSION REQUEST TO CONTROL UNIT</li> </ul>   |  |
| 368 | RECEIVE LOGIN SCRIPT          | <ul style="list-style-type: none"> <li>• PROCESS LOGIN SCRIPT</li> <li>• PROVIDE INTERFACE CONFIGURATION</li> <li>• GO TO BASE STATE</li> </ul> |  |

**FIG. 9**

380

| STANDBY STATE - WAITING FOR EVENTS                 |  |
|--|--|
| EVENTS   | STEPS  |
| 388 AUDIO SESSION SIGNAL FROM PACKET VOICE GATEWAY | <ul style="list-style-type: none"> <li>• TRANSITION TO CALL SIGNALING STATE</li> <li>• REPORT STATE TRANSITION TO CSS APPLICATION</li> </ul>                                 |
| 390 SUBSCRIBER INTERFACE CONTROL (OFF HOOK)        | <ul style="list-style-type: none"> <li>• TRANSITION TO OFF HOOK STATE</li> <li>• REPORT STATE TRANSITION TO CSS APPLICATION</li> </ul>                                       |
| 392 SESSION SETUP EVENT FROM CSS APPLICATION       | <ul style="list-style-type: none"> <li>• SEND CALL SIGNALING MESSAGE TO GATEWAY</li> <li>• TRANSITION TO CALL SIGNALING STATE</li> <li>• REPORT TRANSITION TO CSS</li> </ul> |

382

| CALL SIGNALING STATE - WAITING FOR EVENTS |   |
|---|---|
| EVENTS                                    | STEPS   |
| 394 ON HOOK EVENT                         | <ul style="list-style-type: none"> <li>• RETURN TO STANDBY STATE</li> <li>• REPORT STATE TRANSITION TO CSS APPLICATION</li> </ul>           |
| 396 TERMINATION OF SIGNALING              | <ul style="list-style-type: none"> <li>• RETURN TO STANDBY STATE</li> <li>• REPORT STATE TRANSITION TO CSS APPLICATION</li> </ul>           |
| 398 READY FOR AUDIO SESSION               | <ul style="list-style-type: none"> <li>• TRANSITION TO AUDIO SESSION STATE</li> <li>• REPORT STATE TRANSITION TO CSS APPLICATION</li> </ul> |

**FIG. 10A**

384

| OFF HOOK STATE - WAITING FOR EVENTS  |   |
|--|---|
| EVENTS   | STEPS   |
| 400 SUBSCRIBER INTERFACE CONTROL (KEY PAD ACTIVATION) FROM CSS APPLICATION | • GENERATE DTMF TONE  |
| 402 VALIDATION OF NUMBER SEQUENCE  | • SEND CALL SIGNALING MESSAGES TO GATEWAY<br>• TRANSITION TO CALL SIGNALING STATE<br>• REPORT TRANSITION TO CSS APPLICATION |
| 404 SUBSCRIBER INTERFACE CONTROL (ON HOOK)                                 | • RETURN TO STANDBY STATE   |

386

| AUDIO SESSION STATE - WAITING FOR EVENTS                        |                            |
|---|----------------------------|
| EVENTS  | STEPS                      |
| 406 TERMINATION OF AUDIO SESSION                                | • RETURN TO OFF HOOK STATE |
| 408 SUBSCRIBER INTERFACE CONTROL (KEY PAD ACTIVATION)           | • GENERATE DTMF TONE       |
| 410 SUBSCRIBER INTERFACE CONTROL (ON HOOK) FROM CSS APPLICATION | • RETURN TO STANDBY STATE  |

**FIG. 10B**

**FIG. 11**

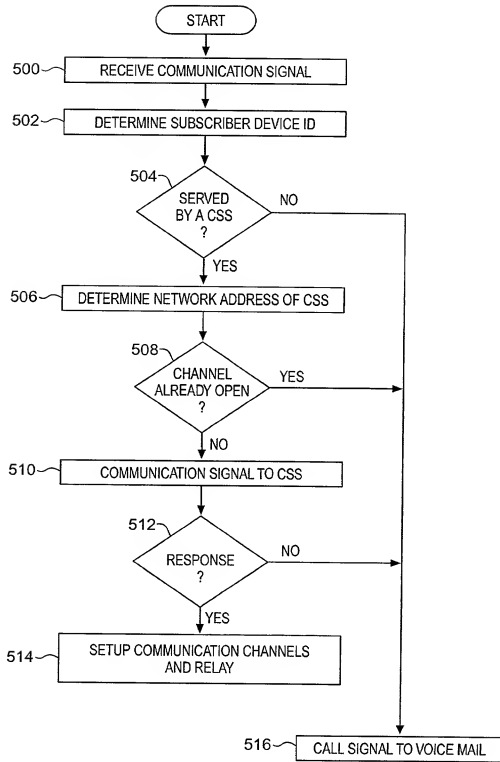


FIG. 11

233

SUBSCRIBER IDENTIFIER

237

CURRENT NETWORK LOCATION TABLE

| SUBSCRIBER ID | SUBSCRIBER NAME | SUBSCRIBER DEVICE ID | CURRENT NETWORK ADDRESS |
|---------------|-----------------|----------------------|-------------------------|
| 1234          | BOB             | 001                  | 192.168.abc.xyz         |
| 1235          | CHRIS           | 002                  | 192.168.def.uvw         |
| 1236          | MARVIN          | 003                  | Open                    |
| .             | .               | .                    | .                       |
| .             | .               | .                    | .                       |
| .             | .               | .                    | .                       |
|               |                 |                      |                         |
|               |                 |                      |                         |
|               |                 |                      |                         |

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FIG. 12